

199—35.10 (476) Additional requirements for gas utilities. In addition to the requirements of rule 35.8(476), a plan for a gas utility shall include the following information:

35.10(1) *Forecast of demand and transportation volumes.* Information specifying its demand and transportation volume forecasts which includes:

a. A statement in numerical terms of the utility's current 12-month and 5-year forecasts of total annual throughput and peak day demand, including reserve margin, based on the PGA year by customer class. The forecasts shall not include the effects of the proposed energy efficiency programs in subrule 35.8(8), but shall include the effects to date of current ongoing utility energy efficiency programs.

b. A statement in numerical terms of the utility's highest peak day demand and annual throughput for the past five years by customer class.

c. A comparison of the forecasts made for the preceding five years to the actual and weather-normalized peak day demand and annual throughput by customer class including an explanation of the weather-normalization procedure.

d. A forecast of the utility's demand for transportation volume for both peak day demand and annual throughput for each of the next five years.

e. The existing contract deliverability by supplier, contract and rate schedule for the length of each contract.

f. An explanation of all significant methods and data used, as well as assumptions made, in the current five-year forecast(s). The utility shall file all forecasts of variables used in its demand and energy forecasts. If variables are not forecasted, the utility shall indicate all sources of variable inputs.

g. A statement of the margins of error for each assumption or forecast.

h. An explanation of the results of the sensitivity analysis performed by the utility, including a specific statement of the degree of sensitivity of estimated need for capacity to potential errors in assumptions, forecasts, and data.

35.10(2) *Capacity surpluses and shortfalls.* Information identifying projected capacity surpluses and shortfalls over the five-year planning horizon which includes a numerical and graphical representation of the utility's five-year planning horizon comparing forecasted peak day demand in each year from paragraph 35.10(1) "a," to the total of existing contract deliverability, from paragraph 35.10(1) "e." The comparison shall list in dth or Mcf any amount for any year that contract deliverability falls below the forecast of peak day demand. Forecasted peak day demand shall include reserve margin.

35.10(3) *Supply options.* Information about new supply options identified by the utility as the most effective means of satisfying all projected capacity shortfall in the 12-month and 5-year planning horizons in subrule 35.10(2). For each supply option identified, the plan shall include:

a. The year the option would be needed.

b. The type of option.

c. The net peak day capacity.

d. The estimated future capacity costs per dth or Mcf of peak day demand of the options.

e. The estimated future energy costs per dth or Mcf of each option in current dollars.

f. A description of the method used to estimate future costs.

35.10(4) *Avoided capacity and energy costs.* Information regarding avoided costs, specifying the days and weeks which constitute the utility's peak and off-peak periods. Avoided costs shall be calculated for the peak and off-peak periods and adjusted for inflation to derive an annual avoided cost over a 20-year period. In addition, all parties may submit information specifying the hours, days, and weeks which constitute alternative costing periods. A party may submit, and the board shall consider, alternative avoided capacity and energy costs derived by an alternative method. A party submitting alternative avoided costs shall also submit an explanation of the alternative method.

*a. **Avoided capacity costs.*** Calculations of avoided capacity costs in the peak and off-peak periods shall be based on the following formula:

$$\text{AVOIDED CAPACITY COSTS} = [(D + OC) \times (1 + RM)] \times (1 + EF)$$

D (demand) is the greater of CD or FD.

CD (current demand cost) is the utility's average demand cost expressed in dollars per dth or Mcf during peak and off-peak periods.

FD (future demand costs) is the utility's average future demand cost over the 20-year period expressed in dollars per dth or Mcf when supplying gas during peak and off-peak periods.

RM (reserve margin) is the reserve margin adopted by the utility.

OC (other cost) is the value of any other costs per dth or Mcf related to the acquisition of gas supply or transportation by the utility over the 20-year period in the peak and off-peak periods.

EF (externality factor) is a 7.5 percent factor applied to avoided capacity costs in the peak and off-peak periods to account for societal costs of supplying energy. In addition, the utility may propose a different externality factor, but must submit documentation of its accuracy.

b. Avoided energy costs. Calculations of avoided energy costs in the peak and off-peak periods on a seasonal basis shall be based on the following formula:

$$\text{AVOIDED ENERGY COSTS} = (E + \text{VOM}) \times (1 + \text{EF})$$

E (energy costs) is the greater of ME or FE.

ME (current marginal energy costs) is the utility's current marginal energy costs expressed in dollars per dth or Mcf during peak and off-peak periods.

FE (future energy costs) is the utility's average future energy costs over the 20-year period expressed in dollars per dth or Mcf during peak and off-peak periods.

VOM (variable operations and maintenance costs) is the utility's average variable operations and maintenance costs over the 20-year period expressed in dollars per dth or Mcf during peak and off-peak periods.

EF (externality factor) is a 7.5 percent factor applied to avoided energy costs in the peak and off-peak periods to account for societal costs of supplying energy. In addition, the utility may propose a different externality factor, but must submit documentation of its accuracy.